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51-14 Harvey MC10 Hydroclave (Project 96-40) (5/97)

The Harvey MC10 Hydroclave is a fully-automated, microprocessor-controlled autoclave with a 10-inch diameter by 15½-inch deep, round, stainless steel chamber and a non-

recirculating water system. This system utilizes fresh water for each sterilization cycle and the used water is exhausted directly into a sink/drain or into the optional non-recirculating water collection reservoir. The exterior dimensions of the sterilizer are 18 inches high by 16 inches wide (add 7 inches for non-recirculating water collection reservoir) by 25¾ inches deep (non-recirculating water collection reservoir connections included). Government models are equipped with dual voltage selection. The autoclave operates at 115 volts ± 5% or 230 volts ± 5%, 50/60 Hz with a loading of 1.495 kW. The unit can be configured for either plug-in or hardwired electrical connection and requires a 20 amp circuit breaker. A dedicated electrical circuit is recommended for fault-free operation. The microprocessor-controlled sterilization parameters are constantly monitored



to assure proper sterilization for each programmed cycle. A time-temperature interlock assures that the sterilization cycle does not begin until the correct parameters are met. Four icon-marked programs on the sealed membrane pad-switch (e.g., wrapped, unwrapped, paper/plastic pouches or liquids) are available which initiate the entire cycle when selected and depressed. All selections are preset for drying except for the liquids cycle. Upon cycle completion, the unit exhausts, beeps twice, and the "STOP" indicator flashes until the door is opened or the "STOP" button is pressed again (if no drying time was selected). If drying was selected, the display shows "Drying" for the duration of time selected. When the drying time is complete, three groups of three beeps sound and the "COMPLETE" indicator lights. All sterilization parameters (date, time, pressure, and temperature) are displayed digitally and can be recorded with an optional printer. The digital display indicates function status during operation and error codes for testing and trouble-shooting. The sterilizer is UL and IEC 601-1 listed and is certified by ETL, CSA, ASME, and ANSI/ADA.

Manufacturer:

GETINGE/Castle Formerly MDT Biologic Company 19645 Rancho Way Rancho Dominguez, CA 90220-6039 (310) 608-2290 (310) 608-7705 FAX

Government Source:

GETINGE/Castle Government Sales Contact: Ken Sealey 1517 Ritchie Highway Suite 209 Arnold, MD 21012 (800) 394-4638 (410) 757-8585 (410) 757-1586 FAX

Suggested Retail Price:

Price Features

\$4,695,00 Basic model.

\$4,890.00 Includes basic model and non-recirculating water collection reservoir.

\$5,295.00 Includes basic model and optional printer.

\$5,490.00 Includes basic model, printer, and non-recirculating water collection reservoir.

Government Price:

Price Features

\$2.195.00 Basic model.

\$2,295.00 Includes basic model and non-recirculating water collection reservoir.

\$2,495.00 Includes basic model and optional printer.

\$2,595.00 Includes basic model, printer, and non-recirculating water collection reservoir.

\$2,995.00 Includes basic model, printer, non-recirculating water collection reservoir, and dual voltage.

ADVANTAGES:

- + Non-recirculating water system.
- + Less soiling of packs and instruments from handpiece lubricant and water deposits.
- + Easy to fill reservoir.
- + Four cycles available (liquids, wrapped, unwrapped, and pouches).
- + Microprocessor controlled for accurate cycle management.
- + Lever-type door handle with dual locking pins ensures even door closure.
- + Has resident diagnostics to verify proper functioning of sterilizer.
- + Reservoir can be easily and completely drained for cleaning.
- + Standard off-the-shelf interchangeable parts may speed some repairs.
- + Operating and servicing instructions are clear and easy to understand.
- + User-replaceable chamber and reservoir filters.
- + Chamber wire rack option allows cassette or trays to be processed vertically.
- + Optional printer is available for documenting cycle parameters.
- + One-piece seamless chamber.
- + Ergonomic design of non-recirculating water collection reservoir aids in emptying.

DISADVANTAGES:

- Large footprint when unit is used with non-recirculating water collection reservoir.
- Heating element is not field replaceable.
- Printer must be changed when changing voltage.
- Requires tools for door gasket replacement.
- Non-reversible door gasket.
- Reservoir filling may be limited by certain overhead cabinet designs.
- Sectional construction for exterior covers makes interior servicing cumbersome.
- Wrapping to hold insulation in place uses 23 "Ace Bandage" type clips and must be cut for access to heating elements for repairs and replacement.
- Top cover (reservoir) must be in place for testing during maintenance.
- No power on/off switch.

SUMMARY AND CONCLUSIONS:

The Harvey® MC10 Hydroclave has an innovative design for its non-recirculating water system to minimize instrument contamination from accumulated handpiece lubricant and water deposits. The life of the sterilizer should be extended because contaminated water does not recirculate in it. The sterilizer has four pre-programmed cycles (liquids, flash, wrapped, and pouches). Its microprocessor-controlled operation allows for accurate cycle management while providing diagnostics. The use of a timetemperature interlock prevents the final sterilization cycle from beginning until the proper temperature/pressure is reached. Door gasket replacement, chamber filter cleaning, and reservoir cleaning can be accomplished with a minimum of effort using standard hand tools. Documentation is well organized with graphics to assist in servicing and operation. The sterilizer can accommodate two standard (8½" x 11½" x 1½") and two small dental (4½" x 8½" x 1½") instrument cassettes placed horizontally with its standard tray-rack system. An optional cassette rack can accommodate 4 standard and 2 small vertically-placed cassettes. With efficiency being a product of cycle speed and drying time, the MC10 Hydroclave is comparable to other tabletop sterilizers. This sterilizer is an appropriate choice for clinics of all sizes, however its large overall footprint takes up valuable counter space. The userfriendly appearance and controls make it easy to use while being informative during all phases of operation. The sterilizer proved to be very reliable throughout the evaluation period and was rated as "Excellent" or "Average" by the clinical evaluators. The Harvey® MC10 Hydroclave sterilizer is rated Acceptable for use by the federal dental services.